



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,050	07/08/2003	Kang Soo Seo	1740-000010/US	7555

30593 7590 03/23/2007
HARNES, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

ZHAO, DAQUAN

ART UNIT	PAPER NUMBER
----------	--------------

2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/614,050

Applicant(s)

SEO ET AL.

Examiner

Daquan Zhao

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-10 are rejected under 35 U.S.C. 101 because When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In *re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component, and it does not become statutory by

Art Unit: 2621

merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 1, 3, 8, 10 recite "a recording medium having a data structure". The "data structure" recites in the claims does not meet the definition of IEEE, wherein the definition of data structure is a physical or logical relation among data elements, designed to support specific data manipulation functions. The body of the claims 1, 3, 8, 10 only direct to a plurality of data packets and a plurality of time control information, which fail to shown any physical or logical relationship. The data structure in claims 1,3, 8 and 10 are treated as non-functional descriptive material recited in a recording medium, which is not statutory subject matter.

Claims 2, 4-7, 9 are also affected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 4, 6, 7, 8, 10, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al (US 6,181,870 B1).

For claim 1, Okada et al teach a recording medium having a data structure for managing video data recorded on the recording medium (e.g. figure 6A shows the data structure of video stream recorded on the DVD, column 16, lines 22-60), comprising:

Art Unit: 2621

- a plurality of data packets recorded on the recording medium (e.g. figure 6A, a video stream contains plurality of GOP, wherein each GOP contains plurality of video packets, column 16, lines 44-60);
- a plurality of time control information areas (e.g. Figure 6H, plurality of GOP contain plurality of video packets, where a PTS and a DTS can be assigned once to each GOP, column 23, lines 26-49), representing decoding time interval information (e.g. interval corresponds to the GOP), each of said plurality of time control information areas recorded at a fixed time interval in a corresponding one of said plurality of data packets (e.g. figure 6H, PTS and DTS in one packet header).

Claims 3, 8, 10, 11 and 12 are rejected for the same reasons as discussed in claim 1 above.

For claim 2, Okada et al teach fixed time interval is not greater than 700 milliseconds (column 24, lines 20-56, continuity of DTS and SCRs exhibit the same characteristic, wherein the time stamp gap must not exceed 0.7 seconds).

For claim 6, Okada et al teach each of time control information areas is recorded in a first data packet within said fixed recording area of the recording medium (e.g. figure 6C shows the first video packet in the GOP and figure 6H shows the DTS is in the Packet Header, wherein only the first video packet has a Packet header, and column 23 lines 42-45 teach that the DTS can be in all packet).

Art Unit: 2621

For claim 7, Okada et al teach the time control information areas is recorded in an arbitrary one data packet within said fixed recording area of the recording medium (column 23 lines 42-45 teach that the DTS can be in all packet).

For claim 4, Okada et al teach fixed recording area is a sector (e.g. figure 3A and 3 B, column 12, line 42-column 13, line 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,181,870 B1) as applied to claims 1, 2, 3, 4, 6, 7, 8, 10, 11 and 12 above, and further in view of Yoo et al (US 2002/0,150,392 A1).

See the teaching of Okada et al above.

For claim 9, Okada et al fail to specify fixed packet interval is 10 packets. Yoo et al teach a fixed packet interval is 10 packets (paragraph [0033]). It would have been obvious for one ordinary skill in the art at the time the invention was made to have use 10 packets as a fixed interval in the system disclosed by Okada et al to simplify the data process step and reduce the time for data processing.

Art Unit: 2621

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,181,870 B1) as applied to claims 1, 2, 3, 4, 6, 7, 8, 10, 11 and 12 above.

See the teaching of Okada et al above.

For claim 5, Okada et al fail to specify the sector has a recording area of 2048 bytes. The examiner takes official notice of a recording area of 2048 bytes since it is well known in the DVD technology. It would have been obvious for one ordinary skill in the art at the time the invention was made to use 2048 bytes for the sector to ensure that the optical pickup can move at a constant velocity while performing access within a single zone. By doing so, the recording density of the DVD is raised, and rotation control during recording and reproduction is made easier.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Owashi et al (US 6,757,478 B2); Yamagishi et al (US 6,141,491).

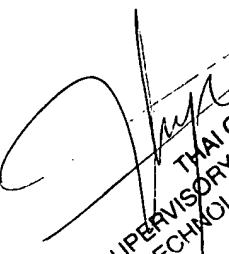
Art Unit: 2621

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao



THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Tran Thai Q
Supervisory Patent Examiner